

# NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

## F A C T      S H E E T

(pursuant to NAC 445A.236)

### Permittee Name:

Elko County Public Works  
155 South 9th Street  
Elko, Nevada 89801

### Permit Number:

NEV2003305

### Location:

The Bear Creek Water Treatment Plant is located on Bear Street in the unincorporated town of Jarbidge, Elko County, Nevada. Latitude: 41°52'30"N.; Longitude: 115°26'10"W. in Section 17, T. 46N., R. 58E. MDB&M.

### General

The Permittee operates a water treatment system which diverts water from Bear Creek into a 150,000 gallon storage tank, then chlorinates the water as it enters the gravity distribution line, prior to delivery into the Jarbidge town distribution system. The facility is being upgraded to both add additional water storage with a second 150,000 gallon storage tank, and to meet State and Federal requirements for protection against *giardia cysts* and *cryptosporidium oocysts*, by installing a three component filtration system consisting of a sand filter, a 10 micron cartridge filter, and two one micron cartridge filters. Product water from the filtration plant will be pumped into a 34,000 gallon chlorine contact chamber for disinfection, then will flow by gravity to the two 150,000 gallon storage tanks ready for distribution.

The Permittee proposes to discharge the filter backwash wastestreams from the sand filter to a catch basin, which in turn is piped to a baffled sand interceptor for solids settling, prior to discharge to the 1100 foot long linear leachfield for disposal via percolation. The percolation pipe will be laid in drain rock in the lower portion of a common trench in the middle of the service roadway extending below the plant and water storage tanks. The common trench will also contain the distribution pipe, an emergency water pipe (dry) to service the plant from the Jarbidge River if ever needed, and telephone and electric utilities that serve the plant. The Permittee is required to monitor the discharge (flow) to the leachfield.

**FLOW:** The system will backwash (discharge) approximately two times a day depending on water use, or 0.0017 MGD for a 30-day average (1.17 gpm to 3.5 gpm for each backwash per day). The maximum design flow is 0.005 MGD.

### **Receiving Water Characteristics**

The receiving waters are the groundwater of the State of Nevada. Depth to groundwater from the bottom of the percolation trench is approximately 4 - 6 feet or greater, and is potable. No adverse effects are expected as a result of this discharge on groundwater or surface waters of the State.

### **Monitoring:**

Number of Backwash Cycles/month:	Monitor and Report	Continuous Record
Total Flow: (gallons)	Monitor and Report	Monthly Calculate <sup>1</sup>

- 1.) The total flow in gallons per month shall be calculated by multiplying the number of backwash cycles recorded in a log, by the calculated backwash flow (gallons) per cycle. This information shall be reported quarterly, as required by the permit.

### **Procedures for Public Comment**

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the reuse permit, is being sent to the **Elko Daily Free Press** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice, by November 17, 2003. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons.

The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted to accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

**Proposed Determination**

The Division has made the tentative determination to issue the proposed permit for a five (5) year period.

**Schedule of Compliance:**

The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance.

- a. The Permittee shall keep a log of the number of daily backwash cycles, and of flow discharged to the leachfield in accordance with the permit requirements in Part I.A.1.
- b. A brief Operations and Maintenance Manual (O & M) for the backwash discharge management, and system components management is required to be submitted to NDEP by December 30, 2004. The document shall be prepared by the Certified Water Treatment Plant Operator for the facility, and reviewed by the Elko County Public Works Department Engineer prior to submission to NDEP for review and approval.

**Rationale for Permit Requirements**

Monitoring is required to monitor the quantity of water discharged to the leachfield for percolation, and the number of complete backwash cycles which contribute to that discharge of water.

Prepared by: Icyl C. Mulligan  
September, 2003